

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	234577	(tuning near3 fork) or saw or baw or qcm or microbalance or resonator or cantilever or ((surface or bulk) near3 acoustic\$4) or trident or bimorph or unimorph or torsion	US-PGPUB; USPAT	OR	ON	2006/02/17 09:18
S2	173355	hydrophob\$6	US-PGPUB; USPAT	OR	ON	2006/02/10 15:59
S3	96045	poros\$6	US-PGPUB; USPAT	OR	ON	2006/02/10 16:00
S4	2	S1 same S2 same S3	US-PGPUB; USPAT	OR	ON	2006/02/10 17:21
S5	209159	(tune or tuning or change or changing) with (resonant or resonance or frequency or performance)	US-PGPUB; USPAT	OR	ON	2006/02/10 16:02
S6	10264	S5 same S1	US-PGPUB; USPAT	OR	ON	2006/02/10 16:03
S7	2708	S6 same (layer or material or cover)	US-PGPUB; USPAT	OR	ON	2006/02/10 16:03
S8	13098	S5 with (layer or material or cover)	US-PGPUB; USPAT	OR	ON	2006/02/10 16:03
S9	1300	S8 same S1	US-PGPUB; USPAT	OR	ON	2006/02/10 16:04
S10	2866990	fluid or gas or gaseous or liquid or water or air or nitrogen or oxygen or oil or lubricant or petroleum	US-PGPUB; USPAT	OR	ON	2006/02/10 16:05
S11	175	S10 same S9	US-PGPUB; USPAT	OR	ON	2006/02/10 18:15
S12	1934	tunable with S1	US-PGPUB; USPAT	OR	ON	2006/02/10 18:14
S13	180	S10 same S12	US-PGPUB; USPAT	OR	ON	2006/02/10 18:17
S14	179	S13 not S11	US-PGPUB; USPAT	OR	ON	2006/02/10 18:17
S15	234772	(tuning near3 fork) or saw or baw or qcm or microbalance or resonator or cantilever or ((surface or bulk) near3 acoustic\$4) or trident or bimorph or unimorph or torsion	US-PGPUB; USPAT	OR	ON	2006/02/14 12:57
S16	237148	(S15 or tsm or (thickness near3 shear))	US-PGPUB; USPAT	OR	ON	2006/02/14 12:57

## EAST Search History

S17	237766	quartz or (lithium adj niobate) or (zinc adj oxide) or (lead near3 zirconate near3 titanate) or pzt or (gallo adj germanates) or gallogermanate or langasite or langanite or langatate or diomignite or (lithium adj tetraborate) or (bismuth near3 germanium near3 oxide) or (gallium adj phosphate) or (gallium adj nitride) or (aluminum adj nitride)	US-PGPUB; USPAT	OR	ON	2006/02/14 13:00
S18	1324276	diamonex or dlc or fluoropolymers or silicone or silane or polyolefin or carbide or nitride or oxide or diamond or polytetrafluoroethylene or fluorosilicone or polyethylene or polypropylene or (silicon adj carbide) or (silicon adj nitride) or (para adj xylylene) or parylene	US-PGPUB; USPAT	OR	ON	2006/02/14 13:04
S19	126035	S17 same S18	US-PGPUB; USPAT	OR	ON	2006/02/14 13:04
S20	2020	S19 same S16	US-PGPUB; USPAT	OR	ON	2006/02/14 13:04
S21	609	S20 same (frequency or performance or tunable or tune)	US-PGPUB; USPAT	OR	ON	2006/02/14 13:16
S22	102	S20 same (performance or tunable or tune)	US-PGPUB; USPAT	OR	ON	2006/02/16 10:42
S23	2	((("5771253") or ("6051907"))).PN.	US-PGPUB; USPAT	OR	OFF	2006/02/16 10:42
S24	1	("6936837").PN.	DERWENT	OR	OFF	2006/02/17 09:18
S25	1	2003-059085.NRAN.	DERWENT	OR	ON	2006/02/17 09:18
S26	20	((("3622968") or ("3718032") or ("3778757") or ("4342936") or ("4349881") or ("4370662") or ("4391338") or ("4526480") or ("4543829") or ("4721874") or ("4734609") or ("4741200") or ("4779451") or ("4812698") or ("4910523") or ("5179028") or ("5191791") or ("5201215") or ("5224174") or ("5253530"))).PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:03

## EAST Search History

S27	20	((("4782332") or ("4970492") or ("5332961") or ("5434650") or ("5571401") or ("5604441") or ("5777210") or ("5789665") or ("5818731") or ("5915499") or ("6247354") or ("6260408") or ("6306358") or ("6456096") or ("6459995") or ("6519034") or ("6536634") or ("6557396") or ("20020064649") or ("20020162390")).PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:05
S28	9	((("20020162385") or ("3,710,275") or ("4,549,427") or ("4,802,370") or ("5,334,900") or ("5,445,008") or ("6286363") or ("6,644,095") or ("6023961")).PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:06
S29	13	((("20020074297") or ("20020121132") or ("20030000291") or ("20030041659") or ("5155098") or ("5,535,001") or ("5,524,477") or ("5571952") or ("5435170") or ("5477726") or ("3921622") or ("4145922") or ("4644803")).PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:08
S30	20	((("5357964") or ("5375470") or ("5454045") or ("5455475") or ("5469369") or ("5488866") or ("5524636") or ("5653939") or ("5734098") or ("5776359") or ("5852229") or ("5889351") or ("5985356") or ("6044694") or ("6182499") or ("4729237") or ("3902365") or ("4312228") or ("4596697") or ("4760351")).PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:09
S31	19	((("4767719") or ("4922745") or ("5283037") or ("5296374") or ("5306644") or ("5533402") or ("5571401") or ("5698089") or ("5705399") or ("5741961") or ("5744902") or ("5770038") or ("5798452") or ("5827952") or ("5959297") or ("6,034,775") or ("6151123") or ("6157449") or ("6175409")).PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:10
S32	11	((("6260407") or ("6265226") or ("6294388") or ("6296771") or ("6336353") or ("6371640") or ("6393895") or ("6401519") or ("20010010174") or ("3762197") or ("3273377")).PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:12

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S33	20	((("4103224") or ("5885849") or ("5792938") or ("6126311") or ("6041642") or ("4535620") or ("6327890") or ("6494079") or ("5338416") or ("5464509") or ("6275137") or ("6311549") or ("6441716") or ("6511915") or ("20020068482") or ("20020070241") or ("20020137342") or ("4862384") or ("6661162") or ("5325704"))).PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:13
S34	12	((("20030124028") or ("20030116497") or ("20030118078") or ("20030119060") or ("20020172727") or ("20030041653") or ("4361026") or ("3926271") or ("4624129") or ("4696181") or ("6626025") or ("6545392"))).PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:15
S35	20	((("5918354") or ("20020178805") or ("5361632") or ("3903732") or ("4602505") or ("20030213292") or ("6412131") or ("4802384") or ("4904978") or ("5204529") or ("6269686") or ("5670709") or ("20020194906") or ("4783987") or ("5531091") or ("6176323") or ("5741962") or ("5006845") or ("5622223") or ("20030179002"))).PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:16
S36	18	((("5235844") or ("5421190") or ("4890480") or ("20020064649") or ("6536634") or ("20030062910") or ("20030083825") or ("20030222656") or ("20020113596") or ("20030145647") or ("20020148529") or ("6564126") or ("6640644") or ("6509749") or ("5533402") or ("20030041653") or ("6407479") or ("20020092340"))).PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:18
S37	1	("5661233").PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:18
S38	2	((("6,223,589") or ("4,893,496"))).PN.	US-PGPUB; USPAT	OR	OFF	2006/03/02 12:18